

5. The device of claim 1, wherein the at least one input end and the at least one output end are arranged to alternate with each other in the same direction or in a different direction.

6. The device of claim 1, wherein the at least one input end is arranged in a line in a column direction.

7. The device of claim 6, wherein the input cell of the at least one input end uses a plurality of piezoelectric materials whose voltage differences are variable depending on a pressure degree of activation, and senses the input signal by a variation of a variable resistor electrically connecting the piezoelectric material.

8. The device of claim 7, wherein the variable resistance value is set such that a voltage difference generated by the piezoelectric material is relatively less than a voltage difference generated by the resistor.

9. The device of claim 8, wherein the piezoelectric material is one of Piezoelectric Transducer (PZT) and PolyVinylidene Fluoride (PVDF).

10. The device of claim 1, further comprising an output generator operated by the controller depending on the output signal of the at least one output end.

11. The device of claim 1, wherein the output generator is one of a vibration generator, a physical force generator, and a temperature generator, or a combination thereof.

12. The device of claim 9, wherein the controller controls the output generator to generate various intensities of a vibration, a contact force, or temperature variation in response to the input signal of the at least one input end.

13. A method for driving a tactile input/output device, comprising:

- providing at least one input end comprising a plurality of input cells arranged at regular intervals;
 - providing at least one output end comprising a plurality of output cells arranged at regular intervals; and
 - providing a controller for controlling the at least one input end and the at least one output end,
- wherein the at least one input end and the at least one output end are installed to form one array, and
- wherein the input cell and the output cell do not overlap from each other.

14. The method of claim 13, wherein the controller controls the at least one input end and the at least one output end separately from each other.

15. The method of claim 14, wherein the controller senses an input signal of the at least one input end and controls the at least one output end to generate a corresponding output signal.

16. The method of claim 15, further providing an output generator coupled to the at least one output to operate depending on an output signal, and

wherein the controller variously controls the output generator in response to the input signal of the at least one input end.

17. The method of claim 16, wherein the output generator is one of a vibration generator, a physical force generator, and a temperature generator, or a combination thereof.

18. The method of claim 17, wherein the controller controls the output generator to generate various intensities of a vibration, a contact force, or temperature variations in response to the input signal of the input end.

19. A method for detecting an input signal of a tactile input/output device, comprising:

- providing at least one input end comprising a plurality of input cells arranged at regular intervals;
- providing at least one output end comprising a plurality of output cells arranged at regular intervals; and
- providing a controller for controlling the input end and the output end,

wherein the at least one input end uses a plurality of piezoelectric materials arranged in a column as input cells, electrically connects the piezoelectric materials with a variable resistor, reads a variation of the variable resistor depending on a voltage difference of the piezoelectric material that varies depending on an applied pressure, and detects an input signal of various types.

20. The method of claim 19, wherein the variable resistance value is such that a voltage difference generated by the piezoelectric material is relatively less than a voltage difference generated by the resistor.

21. The method of claim 20, wherein the piezoelectric material is one of Piezoelectric Transducer (PZT) and PolyVinylidene Fluoride (PVDF).

22. The method of claim 19, wherein the at least one input end is arranged in a regular sequence in a column direction and forms a Y-axis.

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